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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,409	08/06/2003	Mark Haines	200210234-1	1431

22879 7590 10/13/2006

HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER

MRUK, GEOFFREY S

ART UNIT PAPER NUMBER

2853

DATE MAILED: 10/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/635,409

Applicant(s)

HAINES ET AL.

Examiner

Geoffrey Mruk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5-10, 12, 25-27, 29-32 and 41-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5 and 29 is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-10, 12, 25-27, 30-32, 41-43, and 45-47 is/are rejected.
- 7) ☒ Claim(s) 44 and 48 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Terminal Disclaimer***

The terminal disclaimer filed on 20 July 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on Application No. 10/635,636 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### ***Claim Objections***

Claims 42, 43, 46, and 47 are objected to because of the following informalities: claims 42, 43, 46, and 47 contain idiomatic English, specifically for the phrase "externally of the frame." Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 6-10, 12, 25-27, 30-32, 41-43, and 45-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Arashima et al. (US 5,481,289).

With respect to claim 1, Arashima discloses a filter (Fig. 7, elements 63, 70) for a printhead assembly (Fig. 3), the filter comprising:

- a frame (Fig. 7, element 19) having a first face (Fig. 7, element 94) and a second face (Fig. 7, element 52) opposite the first face, an opening (Fig. 3, element 69) communicated with the first face and the second face, and a fluid passage (Fig. 7, volume between elements 63, 70) communicated with the opening;
- filter material provided on each the first face (Fig. 7, element 70) and the second face (Fig. 7, element 63) of the frame and enclosing the opening and the fluid passage of the frame;
- a first fluid port (Fig. 7, element 94) communicated with the fluid passage of the frame;
- a permeable material (Fig. 7, element 67) provided in a fluid path of the first fluid port and
- a second fluid port (Fig. 7, element 52) spaced from the first fluid port and communicated with the fluid passage of the frame.

With respect to claim 2, Arashima discloses the fluid passage (Fig. 7, area between elements 63, 70) of the frame is adapted to direct air from the first fluid port to the second fluid port (Column 7, lines 16-20).

With respect to claim 3, Arashima discloses the permeable material (Fig. 7, element 67) is adapted to allow air to pass therethrough before the permeable material is wetted by liquid ink and prevent air from passing therethrough when the permeable material is wetted by the liquid ink (Column 7, lines 16-20).

With respect to claim 6, Arashima discloses the permeable material includes a mesh material (Column 7, lines 12-14).

With respect to claim 7, Arashima discloses the filter material is secured (Column 10, line 58) to the frame around a perimeter of the opening (Fig. 7, element 94).

With respect to claim 8, Arashima discloses the filter material has a mesh size in a range of approximately 2 microns to approximately 20 microns (Column 11, lines 6-11).

With respect to claim 9, Arashima discloses the filter material (Fig. 7, elements 63, 70) is adapted to allow liquid ink to pass therethrough, (Column 11, lines 1-11) and wherein the filter material is adapted to prevent air from passing therethrough when the filter material is wetted by the liquid ink (Column 1, lines 60-67).

With respect to claim 10, Arashima discloses the filter material (Fig. 7, elements 63, 70) is adapted to allow air to pass therethrough before the filter material is wetted by the liquid ink (Column 7, lines 16-20).

With respect to claim 12, Arashima discloses the frame (Fig. 7, element 19) has a substantially rectangular shape, and wherein the first fluid port (Fig. 7, element 94) and the second fluid port (Fig. 7, element 52) extend from a side of the substantially rectangular shape.

With respect to claim 25, Arashima discloses a printhead assembly (Fig. 3), comprising:

- a carrier (Fig. 3, element 60) having a fluid manifold (Fig. 9, element 95) defined therein;
- a printhead die (Fig. 4) mounted on the carrier and communicated with the fluid manifold; and

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- a fluid delivery assembly (Fig. 3, element 66) coupled with the carrier and including a filter (Fig. 7, elements 63, 70) including a frame (Fig. 7, element 19) having a first face (Fig. 7, element 94) and a second face (Fig. 7, element 52) opposite the first face, an opening communicated with the first face and the second face, and a fluid passage (Fig. 7, volume between elements 63, 70) communicated with the opening, filter material provided on each the first face (Fig. 7, element 70) and the second face (Fig. 7, element 63) of the frame and enclosing the opening and the fluid passage of the frame, first and second fluid port (Fig. 7, elements 94, 52) communicated with the fluid passage, and a permeable material (Fig. 7, element 67) provided in a fluid path of the first fluid port,
- wherein the second fluid port of the filter communicates with the fluid manifold of the carrier (Column 16, lines 12-24).

With respect to claim 26, Arashima discloses the fluid passage (Fig. 7, volume between elements 63, 70) of the frame is adapted to direct air from the first fluid port to the second fluid port (Column 7, lines 16-20).

With respect to claim 27, Arashima discloses the permeable material (Fig. 7, element 67) of the filter is adapted to allow air to pass therethrough before the permeable material is wetted by liquid ink and prevent air from passing therethrough when the permeable material is wetted by the liquid ink (Column 7, lines 16-20).

With respect to claim 30, Arashima discloses wherein the permeable material of the filter includes a mesh material (Column 7, lines 12-14).

With respect to claim 31, Arashima discloses the filter material of the filter (Fig. 7, elements 63, 70) is adapted to allow liquid ink to pass therethrough, and wherein the filter material of the filter is adapted to prevent air from passing therethrough when the filter material is wetted by the liquid ink (Column 7, lines 16-20).

With respect to claim 32, Arashima discloses the filter material (Fig. 7, elements 63, 70) of the filter is adapted to allow air to pass therethrough before the filter material is wetted by the liquid ink (Column 1, lines 60-67).

With respect to claim 41, Arashima discloses the fluid passage (Fig. 7, volume between elements 63, 70) of the frame (Fig. 7, element 19) communicates with the opening and one of the first face (Fig. 7, element 94) and the second face (Fig. 7, element 52) of the frame.

With respect to claim 42, Arashima discloses the first fluid port (Fig. 7, element 94) communicates with the fluid passage (Fig. 7, volume between elements 63, 70) of the frame (Fig. 7, element 19) and externally of the frame.

With respect to claim 43, Arashima discloses the second fluid port (Fig. 7, element 52) communicates with the fluid passage (Fig. 7, volume between elements 63, 70) of the frame (Fig. 7, element 19) and externally of the frame.

With respect to claim 45, Arashima discloses the fluid passage (Fig. 7, volume between elements 63, 70) of the frame (Fig. 7, element 19) of the filter communicates with the opening and one of the first face (Fig. 7, element 94) and second face (Fig. 7, element 52) of the frame of the filter.

With respect to claim 46, Arashima discloses the first fluid port (Fig. 7, element 94) of the filter (Fig. 7, element 70) communicates with the fluid passage (Fig. 7, volume between elements 63, 70) of the frame (Fig. 7, element 19) of the filter and externally of the frame of the filter.

With respect to claim 47, Arashima discloses the second fluid port (Fig. 7, element 52) of the filter (Fig. 7, element 63) communicates with the fluid passage (Fig. 7, volume between elements 63, 70) of the frame of the filter and externally of the frame of the filter.

#### ***Allowable Subject Matter***

Claims 44 and 48 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant's arguments filed 20 July 2006 have been fully considered but they are not persuasive. The applicant's argument that "With respect to the Arashima et al. patent, applicant submits this patent does not teach or suggest a filter for a printhead assembly as claimed in independent claim 1, nor a printhead assembly as claimed in independent claim 25" and "that the first filter member (70) and the second filter member (63) of the Arashima et al. patent do not constitute filter material provided on opposite first and second faces of a frame and enclosing an opening and a fluid



passage of the frame, as claimed in independent claims 1 and 25" are not persuasive. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., Figure 11) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Geoffrey Mruk whose telephone number is 571 272-2810. The examiner can normally be reached on 7am - 330pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on 571 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

GSM  
10/4/2006



**STEPHEN MEIER**  
**SUPERVISORY PATENT EXAMINER**